

Chapter 3

Defining the Illinois Coastal Zone Boundary

Overview

The Illinois coastal zone boundary is a distinct line that defines the perimeter of the land and water area that is within the limits of the Illinois Coastal Management Program (ICMP). This is the land and water area to which the management, planning, and education from this program apply as well as the program's financial and technical assistance. Defining the coastal zone boundary for Illinois requires delineation of a boundary that extends across the open-water area of Lake Michigan (the lakeward boundary) and a boundary on land that defines the most landward extent of the coastal zone as defined in this document (the inland boundary).

Federal Requirements and Guidelines

The federal Coastal Zone Management Act (CZMA) provides regulations and guidance as to how a coastal state defines both the lakeward (or seaward) boundary and the inland boundary of its coastal zone. For the Great Lakes states, the lakeward boundary of a state's coastal zone is the international boundary with Canada or the state line boundaries with adjacent Great Lake states (15 CFR 923.32). Illinois does not touch on the international boundary, but within the open water area of Lake Michigan the Illinois state line adjoins the state line boundaries of Wisconsin, Michigan and Indiana.

Federal regulations for the inland boundary requires that this line be defined to include those areas for which management is necessary because of direct or significant impact on specific locations of the coastal setting (15 CFR 923.31). Most importantly, the inland boundary must be presented in a manner that is clear and exact enough to permit determination of whether a property or activity is located within the boundary area.

The federal guidelines recognize that urban coastal areas may have significantly altered shorelines and coastal landscapes, and within urban coastal settings the natural system relationships between land and water may be extremely difficult (or impossible) to define in terms of direct and significant impacts. In such cases, the federal guidance is to define the boundary based on consideration of sewage discharge and urban runoff (15 CFR 923.32).

For the Illinois coast, consideration of sewage discharge and urban runoff are important factors in defining the inland boundary along much of the Cook County lakeshore. The federal guidelines for highly urbanized areas also note that states should consider the dependency on water access and visual relationships as factors appropriate for the determination of the inland boundary. Along the urbanized coast of Illinois, several inland waterways provide a primary boating access to Lake Michigan and some inland parks have a green-space connection to the lakeshore. Thus this guidance concerning water access and visual relationships has also been critical in defining the Illinois inland boundary.

Requirement for Excluded Land and Water Areas

An additional federal requirement is that the state program excludes lands that are owned, leased, held in public trust, or whose use is otherwise by law subject solely to the discretion of the federal government, its officers, or agents (15 CFR 923.33). The exclusion of federally owned or leased lands does not exempt activities occurring on those lands from meeting the federal consistency requirements of the CZMA (detailed in Chapter 11). The exclusion does not prevent the state coastal program from forming partnerships and coordinating with federal agencies that own or lease land in a state's coastal zone, but the state program cannot award grants to the federal agencies.

Along the Illinois coastal setting are federal buildings, post offices, Coast Guard installations, federally-owned breakwaters and a variety of other localized federally-managed property that are excluded from the Illinois coastal zone. These localized properties are too small to be identified on the maps in this document that show the Illinois coastal zone boundaries. However, the Illinois coast includes the U.S. Navy's Naval Training Center Great Lakes (NTCGL; also called Great Lakes Naval Training Center). This approximately 1600-acre facility is located along the Lake County section of the Illinois coast and is bordered by the City of North Chicago to the north and the Village of Lake Bluff to the south. The training center includes a breakwater-defended harbor.

The U.S. Navy also has land for housing about 6.5 miles south near the City of Highwood. This is land that had been part of the former U.S. Army's Fort Sheridan. This 698-acre army base was established in 1887 and decommissioned in 1994. The federal government retained select property of the former base for U.S. Army Reserve centers and for housing to aid the GLNTC. Additional federal land of the U.S. Army Corps of Engineers occurs in Chicago near the Chicago Lock.

The Illinois coastal zone has a boundary of exclusion for all of these federal sites. The boundaries for these federal sites are subject to change with time as more or less land is in federal control.

Framework for the Illinois Coastal Boundary

In defining the inland coastal zone boundary for Illinois, three framework criteria were identified. These criteria are consistent with the federal regulations and guidance previously discussed.

- 1) It was desirable to use a watershed approach. This was to assure that all land area having surface water drainage to Lake Michigan was within the coastal zone.
- 2) It was advantageous to make use of the regional transportation network. Roads, streets, highways and railroad right-of-ways provided a means to define a mappable and easily recognizable boundary.
- 3) The engineering history and modification of this coast needed to be considered.

The third of these three framework criteria is particularly important. The Illinois coast has been urbanized and engineered to a degree far greater than the coast of any other Great Lakes state. Along substantial reaches of the Illinois shore, the shoreline has been reshaped from its natural form, some type of shore protection has been installed, the natural watershed drainage to Lake Michigan has been dramatically altered and, with few exceptions, an urban or suburban land cover dominates. The benefit of the urbanized setting is the opportunity to use the transportation grid to define the inland coastal zone boundary. The challenge was to not only consider the Lake Michigan watershed of present day, but also put this in context of the watershed in the natural setting prior to river engineering.

A Two-Component Inland Boundary

Consideration of landscape, watershed, and both coastal and river engineering results in the Illinois coastal zone having a two-component designation for an inland boundary. The *Lakeshore Boundary* defines the landward limit of the coastal zone inland and is generally parallel to the Lake Michigan shoreline. This boundary is based on the Lake Michigan watershed in Illinois as it has existed since the early 1900s. Thus this boundary excludes land areas that historically were part of the Lake Michigan watershed but are now outside of this watershed. These areas were removed from the Lake Michigan watershed due to the historical changes in flow directions along the Chicago and Little and Grand

Calumet River systems, as well as urbanization, paving, and directing of storm-water sewers away from Lake Michigan.

The other component of the inland boundary consists of a coastal zone corridor that extends along the near-lake segments of the river systems that historically flowed to Lake Michigan but are now engineered to flow away from the lake. These corridors are referred to as the *Inland Waterway Corridors* of the Illinois coastal zone. The boundary that defines these corridors is referred to as the *Inland Waterway Boundary*. The inland waterway corridors consist of both the waterway and designated land area to either side of the waterway.

The inland waterway component of the Illinois coastal zone meets the requirements of the federal regulations and guidelines for the inclusion within the coastal zone of rivers (waterways) on which uses may have direct impacts on the coastal waters. Water access and visual relationships link these waterways with the Lake Michigan coast. These waterways also have a transitional role between the Great Lakes watershed and the Mississippi River watershed. The Inland Waterway component of the Illinois coastal zone includes select segments of the Chicago River system (North Branch, South Branch, Main Branch and North Shore Channel) and select segments of the Little and Grand Calumet Rivers.

Public Input on the Illinois Coastal Zone Boundary

The process for defining the Illinois coastal zone boundary involved three stages of discussion with government representatives and the public. Early in the process the IDNR team members determined that using a watershed approach to defining this zone would be the most practical and effective for Illinois. The details as to how the watershed would be defined would be decided through public meeting and discussion. There was also recognition by the IDNR that the Chicago and Little Calumet River systems were historically part of the Lake Michigan watershed but had been removed from the watershed by river engineering in the 20th century. One of the subjects for public input was the issue of how these inland waterways would or would not be addressed by the coastal zone boundary.

The first phase of boundary discussions involved meetings in late winter and spring 2005 between the IDNR team members and representatives of each coastal municipality. Municipal representatives included elected officials as well as municipal engineers and managers. These meetings resulted in a consensus for using a watershed approach. A consensus was also reached for using streets as much as possible to identify the boundary.

In locations where an undulating topography resulted in a convoluted trace for the watershed boundary, representatives of those municipalities were in agreement that simplifying a boundary along the nearest arterial street would be most practical. This provided a common use of Green Bay Road as the coastal zone boundary through most of Lake County and into northern Cook County. For the municipalities of Winnetka, Kenilworth, Wilmette, Evanston and Chicago, there was agreement that the watershed criteria would require a boundary in close proximity to the lakeshore, but that boundary needed to assure inclusion of all lakeshore public land.

This first phase of boundary discussions with the lakeshore municipal representatives included discussion of the Chicago and Little Calumet River systems and how these related to the goals, benefits, and future applications of the ICMP. The agreement that there were clear benefits for including these inland waterways in some way led to additional meetings with representatives from the municipalities of Skokie and Lincolnwood which include the North Shore Channel, and representative of the South Suburban Mayors' Conference which represents municipalities along the Little and Grand Calumet Rivers. Additional meetings were held with representative of the City of Chicago as well as the Metropolitan

Water Reclamation District of Greater Chicago (MWRDGC) which has management responsibilities along these waterways.

Following these meetings, the IDNR prepared a set of large-scale (1:24,000) map displays that covered the entire Illinois coast and showed the line for the proposed boundary. These maps were prepared for the second phase of the boundary-decision process which was a series of four, geographically divided, and advertised public workshops held during July 2005 (Waukegan, Highland Park, Chicago-Loyola University, and the Calumet area). The map displays showed the proposed boundary and the names of all streets or other geographic references that defined this line. Companion displays showed the lakeward boundary in Lake Michigan and how the proposed Illinois boundary compared to existing boundaries in the neighboring states of Wisconsin and Indiana. The map displays included a preliminary proposed street-defined corridor that provided for coastal zone inclusion along the inland waterways.

At each of these July 2005 public workshops, the IDNR provided a presentation describing the rationale for the proposed boundaries and inclusion of the inland waterway corridors. Specifically to address local interests, a detailed description was provided of how the boundary was defined in the geographic area of the meeting site. The workshops provided a forum for public discussion and also provided a catalyst for written comments to the IDNR concerning the boundary. Several follow-up meetings or communication occurred with representatives of several municipalities to refine local boundary issues.

The input regarding the preliminary proposed boundaries was the means for preparing boundary maps for a second round of workshops held in November 2005 at the same four geographic locations used in July. For the November 2005 workshops, the boundary maps were incorporated as a series of 15 page-size maps that allowed both paper distribution and posting as portable document files (pdf) on the IDNR web site. These maps showed the proposed boundary and the names of all boundary streets or other cultural features. The maps included both the lakeshore inland boundary and the boundary defining the inland waterways. The November workshops provided additional opportunities for discussion and refinement of the boundaries.

In the workshops and from subsequent correspondence received by the IDNR, the single issue generating the greatest attention was the proposed corridors along the inland waterways. Comments and support in favor of including these corridors as part of the Illinois coastal zone exceeded the number opposed to inclusion. The opposition focused on the issue that the primary basis for defining the inland boundary was the Lake Michigan watershed. The point was made that these inland waterways, although historically part of that watershed, were no longer capable of discharge to Lake Michigan because of the early 20th century river engineering. Counter points were made that because the locks provide connection between these rivers and Lake Michigan, and because of the history of opening the lock gates during time of heavy precipitation and runoff, these waterways have at times discharged to the lake and have contributed to major water quality issues along parts of the lakeshore.

Support for inclusion of the inland waterways included discussions of how these waterways provide the primary boat launching for boats bound for recreation on Lake Michigan. It was also discussed how these waterways can play a critical role as a first line of defense for the migration of invasive species between the Mississippi River system and the Great Lakes.

Letters favorable to inclusion of the inland waterway corridors were received from the MWRDGC which has management responsibilities along these waterways, as well as the South Suburban Mayors' Conference which wrote on behalf of the municipalities along the proposed corridor proposed for the Little and Grand Calumet Rivers. A letter opposed to inclusion of the inland waterways from an environmental group addressed the watershed issue as well as voiced concern as to how inclusion of the inland waterways would diminish the total available funding for lakeshore projects.

The November 2005 workshops and subsequent communications resulted in the discussion of several compromise options for inclusion of the waterways. One proposal was to have a project evaluation process giving lesser decision weight to inland waterway projects compared to projects along the Lake Michigan coast. Another proposal was to restrict any projects along the inland waterways in the first four years of the Illinois coastal program when funding ratios are most favorable for the federal cost share. However, the final majority decision was that if these inland waterways are part of the program, any proposed projects along these corridors should be equally considered with any along the coast or within the Lake Michigan watershed. Acceptance or rejection of a proposed inland waterways project should be determined purely by an evaluation of its merits.

Lakeward Extent of the Illinois Coastal Zone

The Illinois Coastal Zone has a lakeward extent that reaches to the Illinois state line across the open water area of Lake Michigan. Within Lake Michigan, the Illinois state line adjoins the state boundaries of Wisconsin on the north, Michigan on the east, and Indiana on the south (Figure 3-1). The limits of this open-water area are defined by the geographic coordinates for the three points at the corners of this polygonal offshore area:

- Northeast corner Lat 87° 1' 20" Long 42° 29' 35"
(Junction of Illinois, Wisconsin and Michigan)
- Southeast corner Lat 87° 12' 38" Long 41° 45' 36"
(Junction of Illinois, Michigan and Indiana)
- Southwest corner Lat 87° 31' 35" Long 41° 45' 36"
(Junction of Illinois and Indiana)

The Illinois area of Lake Michigan covers 1,564 square miles. The maximum offshore distance, measured along an east-west line, is about 40 miles at the north end of this lake area along the Illinois and Wisconsin state line. At the south end, along an east-west line corresponding to the Illinois and Indiana state line, the offshore distance is about 17.5 miles.

The narrowest part of this offshore area occurs along the far south Chicago shoreline in the vicinity of Calumet Harbor (Figure 3-2). Here the proximity of the shoreline to the Illinois and Indiana state line results in an offshore coastal zone at most about one mile wide to the east of Rainbow Park. Along the shoreline south of the mouth of the Calumet River, along filled land for former port/industrial use and for Calumet Park, the shoreline intercepts the state line. Where this intercept occurs, the shoreline is the boundary for the Illinois coastal zone and there is no Illinois coastal zone extending into Lake Michigan.

Procedure in Defining the Inland Coastal Zone Boundary

Streets, roads and highways are the primary features used in identifying the inland boundary along both the lakeshore component and the inland waterways component. Although roads are the primary boundary designation, in some settings the location or orientation of roads relative to the most desirable and effective boundary dictated the use of alternates. These alternates are railroad right-of-ways, projections of road alignments beyond the termination of the road, a municipal boundary and, in a few cases, the platted boundaries between parkland and adjacent private property. The following details how the boundary is defined in its various forms:

1. Use of Streets and Roads: Along all designated streets, roads and highways, the boundary is the center of the street, road or highway. In some cases, this may correspond to a painted center line.

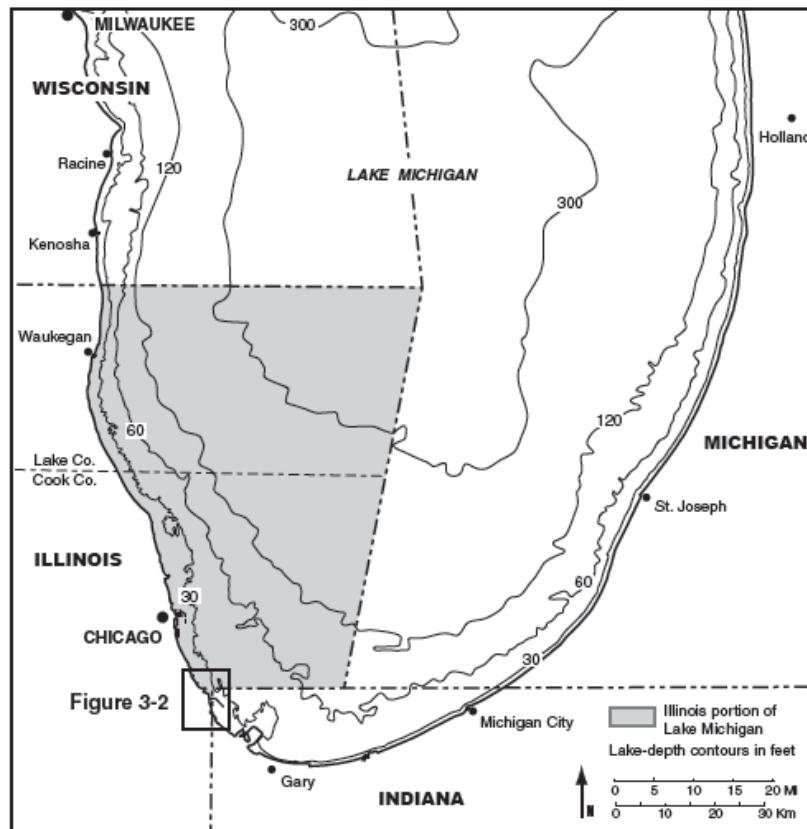


Figure 3-1. The Illinois coastal zone includes the Illinois portion of the water area and lake bottom of Lake Michigan. This offshore area is 1560 square miles.



Figure 3-2. The lakeward extent of the Illinois coastal zone has its minimum width along the north-south segment of the Illinois-Indiana state line.

2. In other cases where there are center planters, turn lanes or some other type of structure or feature that separates the two directions of traffic flow, the boundary is defined so that it is positioned equidistant from the two margins of the roadway.
3. Use of Railroad Right-of-Ways: Where a railroad right-of-way is used for the coastal zone boundary, the boundary corresponds to the property line along the outer edge of the railroad right-of-way. Thus the actual right-of-way is not part of the coastal zone.
4. Use of Road Projections: Where the boundary is defined by a projection between two streets or roads, the projection is a straight line between the center of each of the streets or roads where the projection begins and ends.
5. Use of Bridges: The boundaries along the Inland Waterways include boundaries along bridges that cross these waterways. The boundary is the bridge center and is vertically projected downward to the waterway as well as to any land area beneath the bridge.
6. Interface Between Lakeshore and Inland Waterway Boundaries: Where the lakeshore coastal zone interfaces with the corridors of the inland waterways, the boundary along the interface serves to distinguish these two components of the coastal zone, but the coastal zone is continuous across the interface. On the maps the interface is depicted by a dashed line rather than a solid line.

Organization of the Coastal Zone Boundary Maps

Appendix A contains a set of 15 maps that show the detailed landward boundary of the Illinois coastal zone with all roads or other boundary features clearly identified. Maps 1 through 10 cover the lakeshore boundary and maps 11 through 15 cover the corridors of the inland waterways. The maps are arranged in an overall north to south progression.

Figures 3-3, 3-4, 3-5, and 3-6 serve as index maps showing the extent of coverage for each of the 15 maps contained in Appendix A. These four figures provide coverage on a county basis (Figures 3-3, 3-4, and 3-5) or coverage based on the extent of the inland waterways (Figure 3-6). The discussion of the coastal zone boundary progresses geographically from north to south and includes the corresponding map number. To view the map details discussed in the text requires referencing the maps in Appendix A. The second part of Appendix A contains a street-by-street description of the boundary.

Description of the Lakeshore Coastal Zone Boundary

Lake County (Figure 3-3; Maps 1 through 5)

From the Illinois-Wisconsin state line southward for about 29 miles to southern Lake Forest, the coastal zone boundary follows Green Bay Road (Maps 1 through 4). Along this entire reach Green Bay Road is built at or near the crest of the Highland Park Moraine, thus approximating the watershed boundary between the Des Plaines watershed to the west and the Lake Michigan watershed to the east.

In southern Lake Forest, Green Bay Road intercepts Westleigh Road which serves as a half mile east-west jog along the coastal zone boundary (Map 4). South of the Westleigh Road jog the arterial route has some local name variations such as Sheridan Road where passing the former site of Fort Sheridan and Waukegan Avenue through the Highwood business district. South of Highwood, Green Bay Road is the coastal zone boundary for another three and a half miles southward, through the Highland Park business district, and southward to the Lake-Cook County line (Map 5).

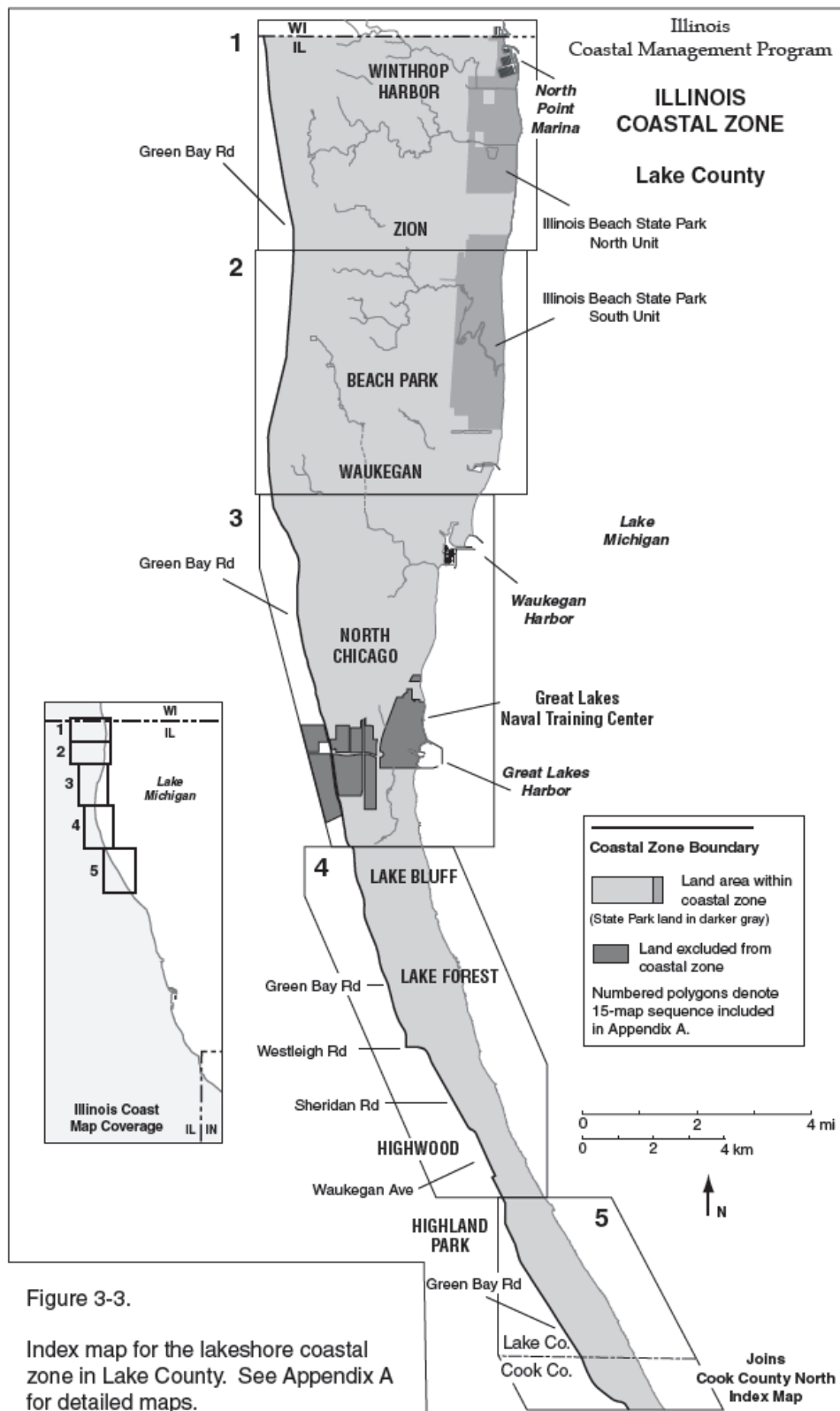


Figure 3-3.

Index map for the lakeshore coastal zone in Lake County. See Appendix A for detailed maps.

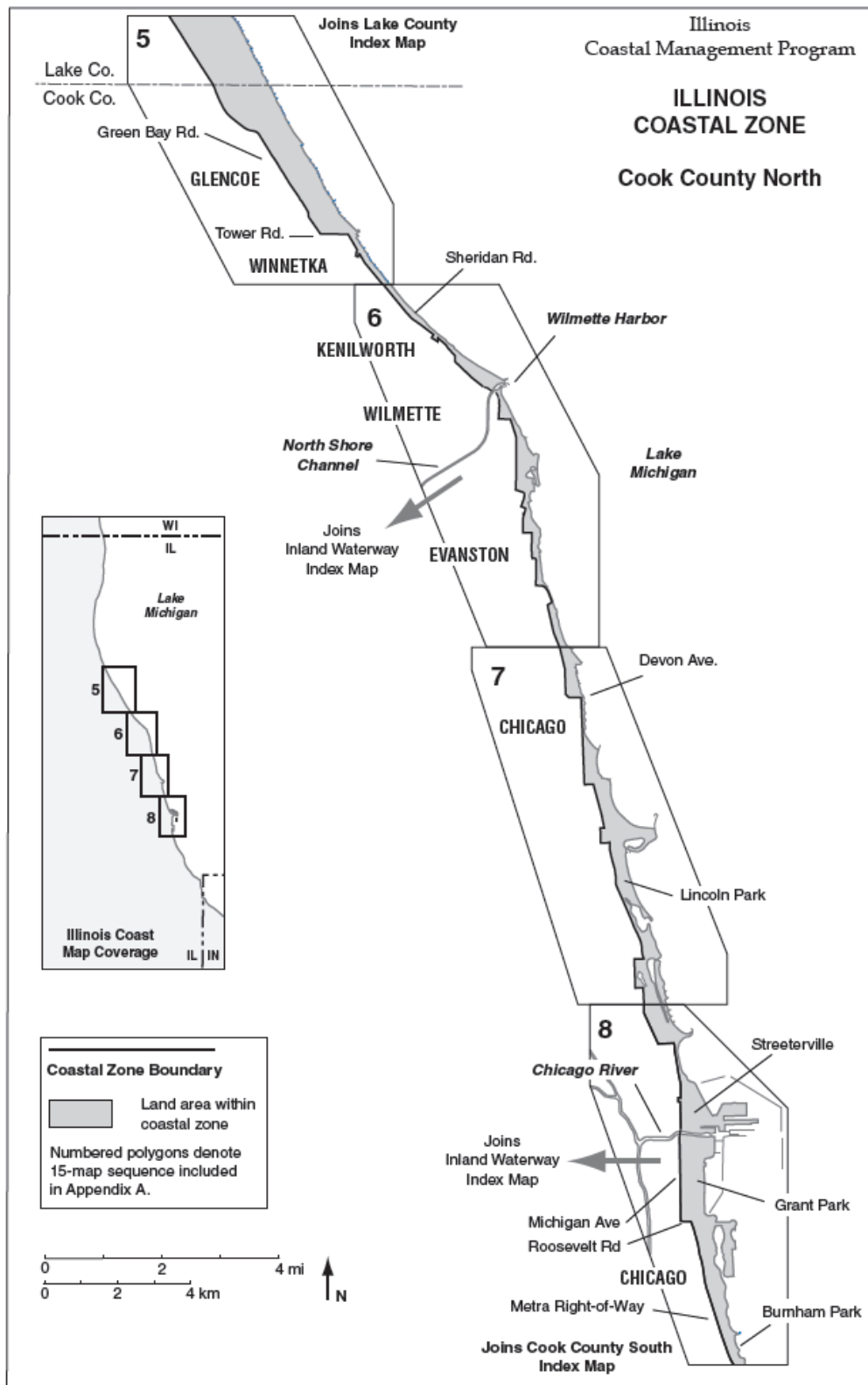


Figure 3-4. Index map for the lakeshore coastal zone in northern Cook County. See Appendix A for detailed maps.

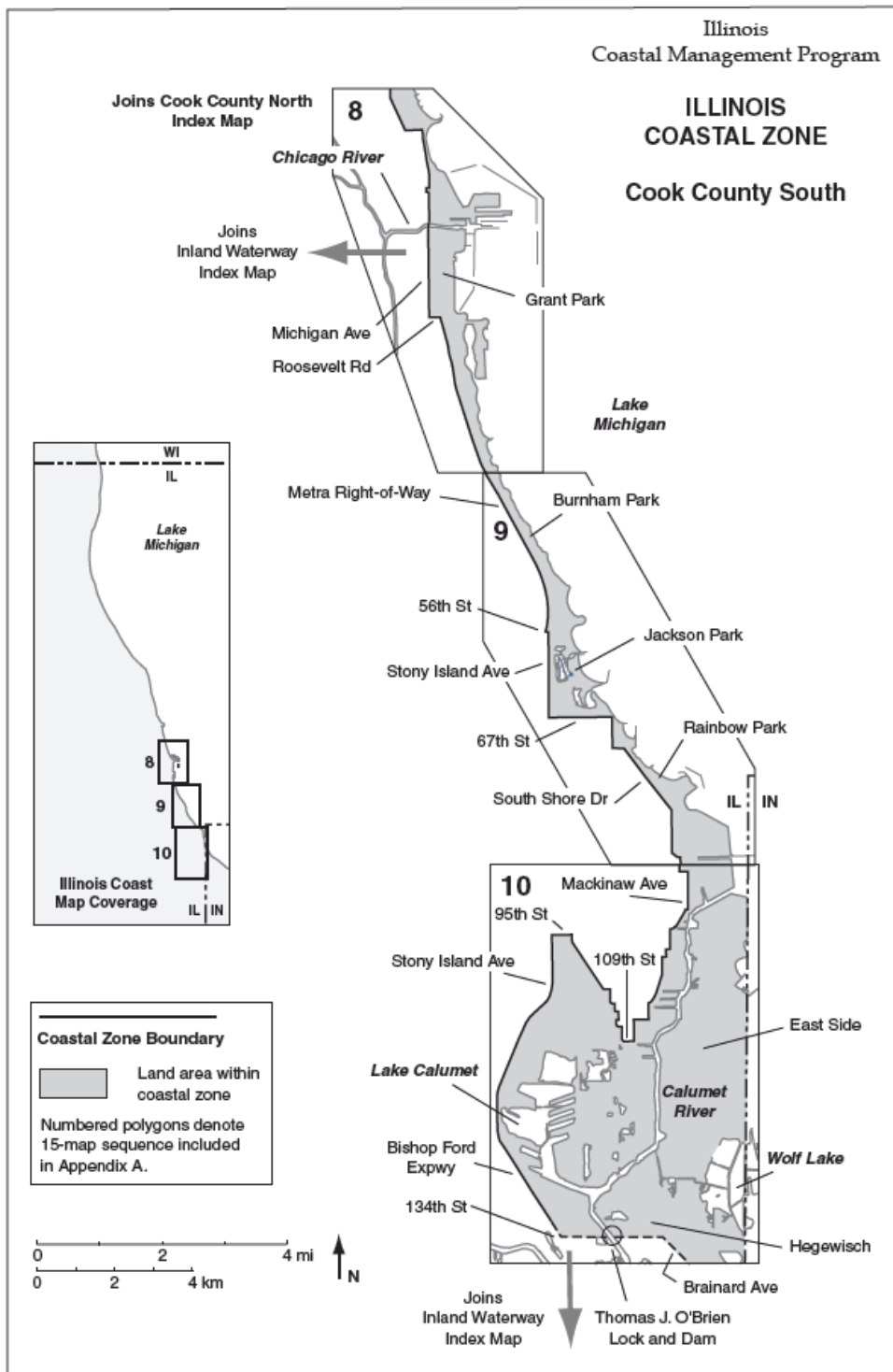


Figure 3-5. Index map for the lakeshore coastal zone in southern Cook County. See Appendix A for detailed maps.

This designated coastal zone boundary through Lake Bluff, Lake Forest, Highwood and Highland Park assures that the ravines of this coastal reach are within the coastal zone. These ravines provide intermittent drainage to Lake Michigan and have various coastal management challenges.

Cook County North (Figure 3-4; Maps 5 through 8)

From the Lake-Cook County line and progressing southward, the coastal zone boundary follows Green Bay Road through Glencoe and into northern Winnetka to the intersection with Tower Road. Tower Road provides a half mile east-west jog between Green Bay Road to the north and Sheridan Road to the south. North of Tower Road, the boundary along Green Bay Road is necessary for the coastal zone to incorporate the most landward reaches of the ravines that bisect the North Shore bluffs; south of Tower Road, there are no ravines.

Sheridan Road is the first arterial inland along the shore from Winnetka, through Kenilworth, Wilmette, and Evanston, and continuing southward to Chicago's far north side. Sheridan Road serves as the inland boundary along this reach.

Storm-water outfalls provide some discharge to Lake Michigan south of Tower Road, but these are limited in number. Combined sewers dominate and these prevent most of the upland surface drainage from reaching the lake. The watershed boundary southward from Tower Road is complex and not always easily defined. In some locations, the watershed boundary is essentially along the upper limits of the beaches or along the upland limits of land where surface runoff can avoid being intercepted by a combined sewer and instead continue overland to reach the beach or lake.

The abundance of lakeshore parks and public land along this segment of shore and arterial streets along the landward limit of the parks and public land provided a means to define a workable and functional boundary. The boundary is defined along the first arterial inland from the shore if this includes all lakeshore parkland, or the boundary is adjusted further inland to an alternate street to assure that no parkland or public land is isolated on the landward side of the boundary.

The park/public land adjustments in boundary lines accounts for "dog ears" that occur along the otherwise coast-parallel boundary. For example, in Winnetka an adjustment from the boundary along Sheridan Road occurs along the western perimeter of Maple Street Park which straddles Sheridan Road (Map 5).

On the north side of the Chicago River (Map 8), the boundary along North Michigan Avenue includes the Streeterville community which is predominantly private property. The North Michigan Avenue boundary allows inclusion of Lakefront Park and public land within the central part of Streeterville that provide a visual and recreational connection to Lake Michigan. The inclusion also recognizes the unique coastal history of Streeterville, much of which resulted from the 1833 – 1869 sand accretion against the jetty built on the north side of the channel leading to and from the Chicago River. A dog ear on the boundary on the west side of North Michigan Avenue provides inclusion within the coastal zone of the parkland at the historic Chicago Water Tower which survived the Great Chicago Fire of 1871.

Cook County South (Figure 3-5; Maps 8 through 10)

On Chicago's south lakeshore beginning at the south end of Grant Park at Roosevelt Road and continuing southward, the coastal zone boundary follows the right-of-way for the Metra railroad (former Illinois Central Railroad) (Maps 8 and 9). The right-of-way approximates the natural shoreline that existed prior to the filling in the late 1800s and early 1900s to create land for Burnham Park. At 56th Street, the boundary jogs east to Stony Island Avenue which bounds the west side of Jackson Park.

South of Jackson Park, the boundary follows the arterial route along Chicago's far south lakeshore. On the south end of Mackinaw Avenue, the boundary reaches to one city block of the Calumet River at the Ewing Avenue Bridge (Map 10). Here the boundary turns inland away from the lakeshore because the Calumet River and adjacent Lake Calumet have direct hydrologic connection to Lake Michigan and therefore water flows freely between these water bodies. The procedure in defining the boundary was to use the first street (or first arterial) inland from either the west bank of the river or the river slips.

All land, wetland and water area between the Calumet River and the Illinois –Indiana state line is within the lakeward coastal zone boundary. This provides inclusion of Wolf Lake and Indian Creek which connects Wolf Lake to the Calumet River as well as the Hegewisch Marsh and other wetland areas. This also provides an interface with the Indiana coastal zone on the Indiana side of the state line. The Chicago communities included within this area between the Calumet River and the state line are East Side and Hegewisch.

The lakeward coastal zone boundary of the Calumet area intercepts the Inland Waterway corridor that extends along the Little and Grand Calumet Rivers. This intercept includes the Thomas J. O'Brien Lock and Dam which separates water of the Calumet River to the north and water from the Little Calumet River to the south. The 134th Street/Brainard Avenue boundary is an approximation of the Lake Michigan watershed boundary across this area as it is defined on the Illinois side of the Illinois-Indiana state line. Powder Horn Lake and the adjacent Burnham Woods Forest Preserve are therefore included in the Lake Michigan watershed portion of the coastal zone.

Description of the Inland Waterway Coastal Zone Corridors

Overview

The Inland Waterway components of the coastal zone are corridors that contain the waterway and land to either side of the waterway. These corridors are centered on select segments of the North Shore Channel, North Branch Chicago River, Main Branch Chicago River, South Branch Chicago River, Little Calumet River, and Grand Calumet River. The Inland Waterway corridors intercept the lakeshore coastal boundary at three locations which are: 1) in Wilmette along Sheridan Road near Wilmette Harbor; 2) in the Chicago downtown area where Michigan Avenue crosses the Chicago River; and 3) in the Calumet area in far southeast Chicago and in Burnham.

Defining the coastal zone boundary to either side of the corridor was based on selecting the first through street inland from the waterway or the first arterial if this provided a more readily defined boundary. The boundary was selected to assure that any existing parkland or public land adjacent to the inland waterway was included in the corridor and no parkland or public land would be excluded.

North Shore Channel (Figure 3-6; Maps 11 and 12)

The North Shore Channel corridor has the most extensive and contiguous parkland and public space of any of the inland waterways. Besides the streets that define boundary lines, several alternate means of boundary definition were necessary because of the absence of through streets in three locations.

1. In Wilmette near the northern end of the channel, the boundary along the east side of the corridor requires a northward projection of Girard Avenue between Isabella and Linden Avenues. No street occurs along much of this reach.
2. On the east side of the corridor between Main Street on the north and Howard Street on the south, the boundary is the corporate boundary between Skokie and Evanston. No street occurs along

this reach. The corporate boundary corresponds to a map projection between McDaniel Avenue on the north and Kedzie Avenue on the south.

3. In Evanston on the west side of the corridor near Green Bay Road, the boundary is defined by an intersection of Green Bay Road and Colfax Street. A railroad right-of-way is a barrier to Colfax Street intercepting Green Bay Road. The boundary is based on a westward projection of Colfax Street.

North Branch Chicago River (Figure 3-6; Maps 12 and 13)

The confluence of the North Branch Chicago River and the North Shore Channel occurs in Chicago just south of Foster Avenue at West River and East River Parks. The North Branch corridor extends from this confluence southward to the Chicago downtown area and the confluence with the Main Branch Chicago River. Streets define the boundary along this entire corridor except for a segment near the southern end of the North Branch where the Metra railroad right-of-way defines the west side of the corridor.

Elston Avenue and Clybourn Avenue are arterials that are not always the first streets inland from the waterway, but these are used in the boundary because of the advantage presented by their orientation which is nearly parallel to the overall river trend for two miles or more. All of Goose Island is within this corridor. The inclusion of Goose Island is consistent with federal regulations that require that all land area of islands be included within the coastal zone.

A notable boundary detail occurs near the confluence of the North Branch and the North Shore Channel. Here the corridor has a western boundary along Albany Avenue which is the western boundary of West River Park. The North Branch Chicago River flows into West River Park, flows over a weir, and falls to the water elevation of the navigable part of the North Branch. The presence of this weir and the lack of navigable waterway above this structure is the basis for precluding the corridor from continuing farther upstream on the North Branch beyond West River Park. The uppermost limit along the inland waterway corridor along the North Branch Chicago River is the footbridge that crosses the river at Albany Avenue.

Main Branch Chicago River (Figure 3-6; Map 13)

The Main Branch Chicago River (also called Main Stem) refers to the east-west one-mile segment of the river between Lake Michigan on the east and the three-way junction with the North Branch and South Branch on the west. The inland waterway corridor along the Main Branch is defined by Kinzie Street on the north and Wacker Drive on the south. The eastern limit of the corridor is Michigan Avenue and the Michigan Avenue Bridge. The waterway connection to Lake Michigan occurs one mile east of the Michigan Avenue Bridge at the Chicago Lock. The river segment east of the Michigan Avenue Bridge is within the lakeshore part of the coastal zone.

South Branch Chicago River (Figure 3-6; Map 13)

The inland waterway corridor along the South Branch Chicago River extends from the junction of the North and Main Branches to Damen Avenue and the Damen Avenue Bridge. The boundary goes beyond the first street inland from the waterway where a more inland arterial provides a boundary that parallels the waterway. Such occurs along the arterials of Canalport Avenue and Archer Avenue. A segment of the Stevenson Expressway (Interstate 55) forms the south side of the corridor between Damen and Ashland Avenues.

The South Branch corridor includes an extension centered on the South Fork South Branch Chicago River. This is also known as Bubbly Creek. The South Fork South Branch is a natural tributary that once

drained a broad area to the south of the South Branch. The southern extent of the original stream channel has been filled and all that remains is the segment north of Pershing Road.

The western or “downstream” limit of the South Branch corridor is at Damen Avenue and the Damen Avenue Bridge. Historically, the South Branch continued another six miles farther west of this bridge and was called the West Fork South Branch. Nearly the entire channel of the West Fork South Branch has been filled. The inland waterway boundary at the Damen Avenue Bridge distinguishes the South Branch Chicago River which is east of the bridge and the Chicago Sanitary and Ship Canal which is west of the bridge.

Little and Grand Calumet Rivers (Figure 3-6; Maps 14 and 15)

The corridor along the Little and Grand Calumet Rivers adjoins the south side of the lakeshore boundary for the Lake Calumet area. This inland waterway is on the inland or “downstream” side of the O’Brien Lock and Dam.

The corridor along the Grand Calumet River is within the municipal limits of Chicago, Burnham and Calumet City. The corridor along the Little Calumet River is within all seven municipalities that comprise this southernmost part of the Illinois coastal zone (*i.e.*, Burnham, Calumet City, Dolton, Riverdale, Blue Island, Calumet Park and Chicago). The western limit of the corridor is Ashland Avenue and two bridge crossings on Ashland Avenue crossing the Calumet-Sag Channel (north) and Little Calumet River (south).

Coastal Boundary Junction with Neighboring States

Figure 3-7 compares the extent of the Illinois inland coastal zone with the inland coastal zones for Wisconsin and Indiana. Wisconsin uses the full extent of coastal counties to define that state’s inland coastal zone. Thus the coastal zone on the Wisconsin side of the Wisconsin-Illinois state line is defined by the landward extent of Kenosha County. Measured from the lake shoreline, this is an inland extent of 27 miles. On the Illinois side of the state line, the inland extent is 4.3 miles. This corresponds to where Green Bay Road intercepts the state line.

The inland coastal zone for Indiana is based on Indiana’s Lake Michigan watershed and the township lines that most accurately approximate this watershed boundary. The difference in inland extent to either side of the Illinois-Indiana state line relates to differences in the watershed characteristics. The coastal zone in Indiana corresponds with the natural Indiana watershed of the Little Calumet River as well as a broad area on the Indiana side of the state line artificially connected to the Little Calumet River by a network of drainage ditches.

The inland extent of the coastal zone on the Illinois side of the state line is in Calumet City where State Street intercepts the state line. Measured from the lake shoreline, this is an inland extent of six miles. On the Indiana side of the state line, the inland extent is 21 miles. This corresponds to the state line intercept of the township boundary that includes the artificially extended watershed of the Little Calumet River.

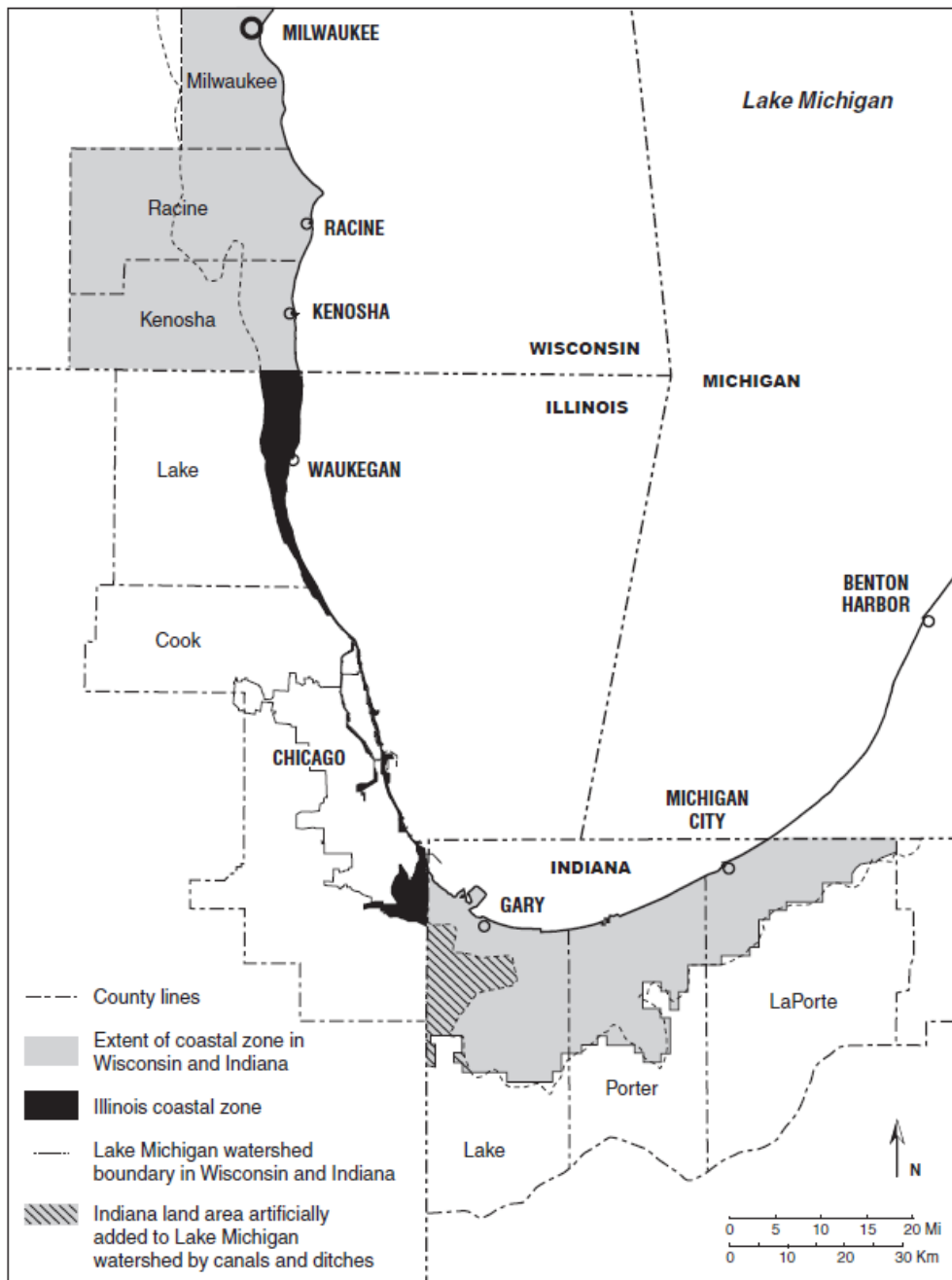


Figure 3-7. The Illinois coastal zone is substantially narrower than what occurs in the neighboring states of Wisconsin and Indiana. The Wisconsin coastal zone comprises the entire coastal county. The Indiana coastal zone extends to township lines that approximate the boundary of the Indiana portion of the Lake Michigan watershed.